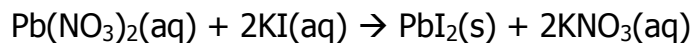


Representing Aqueous Ionic Reactions with Net Ionic Equations

Consider the following chemical equation:



This equation does not show the change that occurs; it shows the reactants and products as intact compounds.

In reality, soluble ionic compounds dissociate into their respective ions in solution.

A **total ionic equation** shows the dissociated ions of the soluble ionic compounds.

A **net ionic equation** shows only the ions that are involved in the reaction (often forms a precipitate).

Spectator ions are ions that are not involved in the reaction.

Guidelines for Writing Net Ionic Equations:

1. Write the balanced chemical equation with full chemical formulas for all reactants and products.
2. Using the solubility table, rewrite the formulas for all high solubility ionic compounds as dissociated ions to show the total ionic equation.
3. Cancel identical amounts of identical entities appearing on both reactant and product sides.
4. Write the net ionic equation, reducing coefficients if necessary.